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EXAMINER

POE, KEVIN T

ART UNIT

PAPER NUMBER

3693

MAIL DATE

DELIVERY MODE

08/14/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/666,979 | <b>Applicant(s)</b><br>FRIEDMAN ET AL. |  |
|                              | <b>Examiner</b><br>KEVIN POE         | <b>Art Unit</b><br>3693                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19,21,22,24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19,21,22,24 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. This office action is in response to applicant's communication of April 9, 2009. Original claims 1-19, 21-22, and 24-25 are pending and have been examined. Claims 20 and 23 have been cancelled. The rejections are stated below.

### *Response to Amendment*

2. Applicant has amendment filed April 9, 2009 has been entered and accepted. Claims 1, 17-19, 21-22, and 24-25 were amended. Based on Applicant's amendment, the rejection of claims 1-25 under 35 U.S.C. 101 have been withdrawn.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1 and 17-19** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 1 and 17, recite, "a method implemented at least partially in a programmed computer". This phrase is vague and indefinite. Please clarify.

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6. Claims 18 and 19, recite, "a system implemented at least partially in a programmed computer". This phrase is vague and indefinite. Please clarify.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-3, 5-8, 9-16, 18, and claim 20-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Quinn et al. [US Pub No. 2004/0172349 A1]** in view of **Rudkin [US Pub No. 2004/0199449 A1]**.

5. Regarding **claims 1, 18, 21-22**, Quinn discloses a method implemented at least partially in a programmed computer for transfer of previously issued employee stock options without exercise of the stock options (Abstract, 0050). Quinn discloses using the programmed computer to automatically receive an employee stock option from an employee holding the employee stock option corresponding to the particular one of the plurality of option value prices without exercising the employee stock option (employee

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options, transfer, amend, 0060) and using the programmed computer to automatically transfer amended stock option to a third party without exercising the amended stock option (employee options, amend, 0060). Quinn discloses using the programmed computer to automatically provide a value to the employee corresponding to the particular one of the plurality of option value prices in exchange for receiving the employee stock option from the employee and using the programmed computer to automatically receive a value from the third party corresponding to the amended stock option in exchange for transferring the amended stock option to the third party (loans substantial amount of money 0029).

Quinn does not explicitly disclose using the programmed computer to automatically provide a plurality of option value prices and using the programmed computer to automatically determine a stock trading price corresponding to a particular one of the plurality of option value prices. However Rudkin teaches determining a value of employee stock options comprising: a computing module; inputting into said computer module one or more initial parameters comprising a maturity date, a volatility factor, a dividend yield, an initial stock price, a strike price, a risk-free price, a vesting period, a departure rate, and a blackout date; and outputting from said computing module one or more of an employee optimal exercise strategy, a probability of departure, a probability of forfeiture, an ESO value, and one or more calibration metrics including an expected option life, a ratio of a stock price to strike price, an expired worthless probability, and a future stock price (0052). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the disclosure

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of Quinn to include the teachings of Rudkin to obtain invention specified. The rationale to combine the teachings would be to determine the value and optimal exercise of employee stock options.

9. Regarding **claim 2**, Quinn does not disclose providing a plurality of option value prices uses an option pricing formula. However Rudkin discloses providing a plurality of option value prices uses an option price formula (Rudkin 0009). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the disclosure of Quinn to include the teachings of Rudkin to obtain invention specified. The rationale to combine the teachings would be to determine the value and optimal exercise of employee stock options.

10. Regarding **claim 3**, Quinn does not disclose wherein the option pricing formula is selected from the group consisting of Black-Scholes, binomial and trinomial methods. However Rudkin teaches wherein the option pricing formula is selected from the group consisting of Black-Scholes, binomial and trinomial methods (0009). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the disclosure of Quinn to include the teachings of Rudkin to obtain invention specified. The rationale to combine the teachings would be to determine the value and optimal exercise of employee stock options.

11. Regarding **claim 5**, Quinn does not disclose determining a stock trading price

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further comprises determining an average stock trading price over a predetermined period of time. However Rudkin teaches determining a stock trading price further comprises determining an average stock trading price over a predetermined period of time (0110). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the disclosure of Quinn to include the teachings of Rudkin to obtain invention specified. The rationale to combine the teachings would be to determine the value and optimal exercise of employee stock options.

12. Regarding **claim 6**, Quinn discloses providing a value further comprises: providing a first value to an employee; and providing a second value to the employee, wherein the first and second values are provided at different times (0029).

13. Regarding **claim 7**, Quinn discloses determining an investment value corresponding to the second value; and providing the investment value to the employee with the second value (0029).

14. Regarding **claim 8**, Quinn teaches wherein amending the employee stock option comprises: amending the maturity; amending the number of shares per option; amending the dilution protection; or amending the dividend protection (0060).

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15. Regarding **claim 9**, Quinn does not disclose further comprising registering an offering of securities underlying the employee stock option. However Rudkin discloses further comprising registering an offering of securities underlying the employee stock option (0039). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the disclosure of Quinn to include the teachings of Rudkin to obtain invention specified. The rationale to combine the teachings would be to determine the value and optimal exercise of employee stock options.

16. Regarding **claim 10**, Quinn does not disclose further comprising issuing the employee stock option to the employee prior to receiving the employee stock option from the employee. However Rudkin teaches further comprising issuing the employee stock option to the employee prior to receiving the employee stock option from the employee (0052). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the disclosure of Quinn to include the teachings of Rudkin to obtain invention specified. The rationale to combine the teachings would be to determine the value and optimal exercise of employee stock options.

17. Regarding **claim 11**, Quinn discloses hedging the amended stock option without exercising the amended stock option (hedging, 0011).

18. Regarding **claim 12**, Quinn discloses wherein hedging the amended stock options include short selling of securities and/or futures contracts (hedging 0011).



19. Regarding **claim 13**, Quinn discloses wherein hedging the amended stock option includes buying and selling securities that underlie the amended stock option (hedging, 0011).

20. Regarding **claim 14**, Quinn discloses wherein hedging the employee stock option includes buying and selling of securities that underlie the employee stock option to rebalance the hedge position (hedging, 0011).

21. Regarding **claim 15**, Quinn discloses an issuer of the employee stock option receives the employee stock option and provides the value to the employee (0029).

22. Regarding **claim 16**, Quinn discloses wherein an issuer of the employee stock option amends the employee stock option without exercising the employee stock option transfers the amended stock option without exercising the amended stock option and receives the value (0011-0012, 0060).

23. **Claims 4, 17, 19, and 24-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Quinn et al. [US Pub No. 2004/0172349 A1]** in view of **Rudkin [US Pub No. 2004/0199449 A1]** and further in view of **Cohen et al. [US Pub No. 2002/0116310 A1]**.

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24. Regarding **claim 4**, Quinn does not explicitly disclose providing a plurality of option value prices provides the plurality of prices in an option-price grid. However Cohen et al. discloses the portfolio grid and toolbar 900, 1000, 1100 has rows and columns which contain all the above referenced data, including real-time stock and option prices. (Cohen 0031)

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Quinn to include the teachings of Cohen et al. to obtain invention as specified in claim 4. The rationale to combine the teachings would be to allow investors to perform an automated comparative analysis of a limitless number of investment opportunities.

25. Regarding **claims 17, 19, and 24-25**, Quinn discloses a method implemented at least partially in a programmed computer for transfer of previously issued employee stock options without exercise of the stock options (Abstract, 0050). Quinn does not disclose using the programmed computer and an option pricing formula to automatically provide a plurality of option value prices arranged in an option-price grid. However Cohen et al. discloses the portfolio grid and toolbar 900, 1000, 1100 has rows and columns which contain all the above referenced data, including real-time stock and option prices (Cohen 0031). At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Quinn to include the teachings of Cohen et al. to obtain invention as specified. The rationale to combine the teachings

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would be to allow investors to perform an automated comparative analysis of a limitless number of investment opportunities.

Quinn does not disclose using the programmed computer to automatically determine an average stock trading price over a predetermined period of time, the average stock trading price corresponding to a particular one of the plurality of option value prices. However Rudkin teaches average ratio of stock price at exercise to the strike price (0110). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the disclosure of Quinn to include the teachings of Rudkin to obtain invention specified. The rationale to combine the teachings would be to determine the value and optimal exercise of employee stock options.

Quinn discloses using the programmed computer to automatically receive an employee stock option from an employee holding the employee stock option without exercise of the employee stock option (employee options, amend, 0060), the employee stock option corresponding to the particular one of the plurality of option value prices (employee options, amend, 0060); in exchange for receiving the employee stock option, using the programmed computer to automatically provide a first value, a second value and an investment value to the employee (loans substantial amount of money, 0029), the first and second values corresponding to the particular one of the plurality of option value prices, the first value provided to the employee at a first time, the second value and the investment value provided to the employee at a second time (loans substantial amount of money, 0029); using the programmed computer to automatically amend the employee stock option, without exercise, to modify: terms of maturity (hedging, 0011);

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terms of the number of shares per option (hedging, 0011); terms of the dilution protection (hedging, 0011); or terms of the dividend protection (hedging, 0011); using the programmed computer to automatically transfer the amended stock option to a third party (transfer employee stock options, 0060); and using the programmed computer to automatically receive a value from the third party in exchange for transfer of the amended stock option to the third party (value, 0029).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN POE whose telephone number is (571)272-9789. The examiner can normally be reached on Monday through Friday 9:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAMES KRAMER can be reached on 571-272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Primary Examiner, Art Unit 3693

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